

STATE OF CALIFORNIA

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

**Base Year Modification Request Certification**

**Part 1: Generation Study - No Extrapolation Diversion Data**

To request a substitution for a previously approved base-year used in calculating the diversion rate for your jurisdiction, please complete and sign this form and return it to your Office of Local Assistance (OLA) representative at the address below, along with any additional information requested by OLA staff. When all documentation has been received, your OLA representative will work with you to prepare for your appearance before the Board. If you have any questions about this process, please call (916) 341-6199 to be connected to your OLA representative.

Mail completed documents to:

**California Integrated Waste Management Board**  
**Office of Local Assistance**  
**1001 I Street, 9th Floor**  
**PO Box 4025**  
**Sacramento, CA 95812-4025**

**General Instructions:**

Please select the **ONE** choice below that best explains your request to the Board.

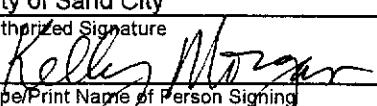
1. Use a recent generation-based study to calculate our current reporting-year generation amount, but not officially change our existing Board-approved base year.  
 2. Use a recent generation-based study to officially change our existing Board-approved base year to a new base year.

The cells on these sheets are protected except for the ones that need information. If you have problems using these sheets, please contact your Office of Local Assistance representative.

**Section I: Jurisdiction Information and Certification**

*All respondents must complete this section*

I certify under penalty of perjury that the information in this document is true and correct to the best of my knowledge, and that I am authorized to make this certification on behalf of:

Jurisdiction Name City of Sand City	County County of Monterey		
Authorized Signature 	Title City Administrator		
Type/Print Name of Person Signing Mr. Kelly Morgan	Date 7-20-01 Phone ( ) (831) 394-3054x12		
Person Completing This Form (please print or type) Charles Pooier	Title Associate Planner		
Affiliation: n/a			
Mailing Address 1 Sylvan Park	City Sand City	State CA	ZIP Code 93955
E-mail address <a href="mailto:chuck@sandcity.org">chuck@sandcity.org</a>			

**Section II: Information for New Generation-Based Study for Existing or New Base Year**

Attach additional sheets if necessary— reference each response to the appropriate cell number (e.g., 4).

Note: New base years must be representative of a jurisdiction's disposal and diversion.

1. Current Board-approved base-year:	2. Proposed new generation-based study year:
1990	1999

3. Explain how the proposed generation study year is representative of average annual jurisdiction disposal and diversion:

This study focused on existing diversion efforts of large retail chain stores over 20,000 square feet in floor area that were previously unreported. This diversion is independently operated by each store surveyed, and this diversion is ongoing.

**4. Enter your diversion rates below.**

Diversion rate calculated using existing base year	a. 38 %	Diversion rate calculated using new generation-based study	b. 45 %
For existing base year pounds/person/day based on generation	4.2	For new generation based study pounds/person/day based on generation	3.3
Residential generation 5 % Non-Residential Generation 95 %		Residential generation 2% % Non-Residential generation 98% %	
Population existing generation-based study 192		Population new generation-based study 190	

5. If there is an increase between 4a and 4b, please explain how the new diversion rate is consistent with your current diversion implementation efforts. If the proposed new generation tonnage results in an increase in your pounds/person/day, please explain how this is consistent with your current diversion implementation efforts and provide any examples, e.g. change in jurisdiction's demographics.

The new base year generation is including previously unreported diversion efforts of corporate "in house" recycling/reuse programs. These programs are ongoing.

6. If the difference between the proposed diversion rates in 4a and 4b is greater than 5 percentage points, please explain the specific reasons for the difference. (For example: new/improved curbside diversion programs.)

A waste stream study was conducted by the City in the Spring of 2000, to evaluate independent recycling, reuse, and other diversion activities within the City's two regional commercial / retail shopping centers that were not previously reported. The two shopping centers total approximately 554,619 square feet of commercial / retail floor area. The goal of this study was to provide data supporting a more accurate representation of the City's overall waste diversion rate.

<b>7. Disposal Tonnage: (enter values)</b>	62	3047	Non-Residential
	<b>Total</b>		
<p>Please select the <b>ONE</b> choice below that best explains your disposal data and complete the required tables.</p> <p><input checked="" type="checkbox"/> a. All tons claimed are from the Board's Disposal Reporting System (No explanation required.)</p> <p><input type="checkbox"/> b. All tons claimed are from a 100 percent audit of hauler and self-haul tonnage. (Please complete Reporting Year Tonnage Request and Modification Certification sheet found at <a href="http://www.ciwmcb.ca.gov/lgccentral/forms/rytnmdrq.doc">http://www.ciwmcb.ca.gov/lgccentral/forms/rytnmdrq.doc</a>)</p> <p><input type="checkbox"/> c. Some Disposal Reporting System data were corrected. (Please complete Reporting Year Tonnage Modification Request and Certification sheet found at <a href="http://www.ciwmcb.ca.gov/lgccentral/forms/rytnmdrq.doc">http://www.ciwmcb.ca.gov/lgccentral/forms/rytnmdrq.doc</a>)</p>			

**8. In the table below, list the summarized diversion activities, and diversion data records that support your claim and are available for Board audit. (Note: The Board expects the jurisdictions to be able to provide all back-up documentation, if requested). Include type of record and location—for example, weight tickets from transfer stations. This section should capture all diversion tonnage (form will perform all addition calculations). If any diversion is from restricted wastes, [agricultural wastes, inert solids (e.g., concrete, asphalt, dirt, etc.), white goods, and scrap metal] please identify those programs/waste types and fill out section 10. Please mark as Attachment 8 all copies of survey forms.**

\*Please provide detailed non-Residential waste audit information in Section 9.

Diversion Activity	Actual tons	Relative Percent to Total Generation	Specific material type(s) (List operation w/multiple materials in one box)	Specific conversion factor used (If any) and Source	Type of record and location of record
<b>Please use the Board's program types. The program type glossary is online at: <a href="http://www.ciwmcb.ca.gov/lgccentral/paris/codes/reduce.htm">http://www.ciwmcb.ca.gov/lgccentral/paris/codes/reduce.htm</a></b>					
<b>Residential Activities:</b>					
<b>Source Reduction</b>					
Backyard composting		0.0%			
Grass recycling		0.0%			
<b>Other Residential source reduction (list each program separately)</b>					
Enter program name		0.0%			
Enter program name		0.0%			
Enter program name		0.0%			
Enter program name		0.0%			
Enter program name		0.0%			
<b>Subtotal Residential Source Reduction</b>	<b>0</b>	<b>0.0%</b>			
<b>Recycling</b>					
Curbside Recycling			Cardboard, paper, mixed containers.		Weight tickets and recent audit of customers at Waste Management Office.
Buyback centers	5	0.1%		N/A	
Drop-off centers	0	0.0%			
	0	0.0%			

Diversion Activity	Actual tons (A)	Relative Percent to Total Generation (A/Total Generation)	Specific material type(s) (List operation w/multiple materials in one box)	Specific conversion factor used (if any) and Source	Type of record and location of record
Please use the Board's program types. The program type glossary is online at: <a href="http://www.ciwmrb.ca.gov/lgcentral/patis/codes/reduce.htm">http://www.ciwmrb.ca.gov/lgcentral/patis/codes/reduce.htm</a>					
<b>Other Residential recycling</b> <input checked="" type="checkbox"/> (list each program separately)					
Enter program name					
Enter program name					
Enter program name					
Enter program name					
<b>Subtotal Residential Recycling</b>	<b>5</b>	<b>0.1%</b>			
<b>Composting</b>					
Green waste drop-off					
Curbside green waste					
Christmas Tree program					
<b>Other Residential composting</b> (list each program separately)					
Enter program name					
Enter program name					
Enter program name					
Enter program name					
<b>Subtotal Residential Composting</b>	<b>0</b>	<b>0.0%</b>			
<b>Subtotal Residential Diversion</b>	<b>5</b>	<b>0.1%</b>			
<b>Non-Residential Activities:</b>					
<b>Source Reduction</b>					
Non-Residential Waste Audits*	3	0.1%			See Section 9
<b>Other non-Residential source reduction</b> (list each program separately)					
Enter Program name					
Enter Program name					
Enter program name					
Enter program name					
<b>Subtotal Non-Residential Source Reduction</b>	<b>3</b>	<b>0.1%</b>			

Diversion Activity	Actual tons	Relative Percent to Total Generation (A/Tot Generation)	Specific material type(s) (List operation w/multiple materials in one box)	Specific conversion factor used (if any) and Source	Type of record and location of record
Please use the Board's program types. The program type glossary is online at: <a href="http://www.ciwmrb.ca.gov/locentral/paris/codes/reduce.htm">http://www.ciwmrb.ca.gov/locentral/paris/codes/reduce.htm</a>					
<b>Recycling</b>					
<b>Non-Residential Waste Audits*</b>					
	1568	27.6%			See Section 9
<b>Other non-Residential recycling (list each program separately)</b>					
7000-FR-MRF-WM	240	4.2%	Cardboard, paper, mixed containers.	N/A	Weigh tickets and recent audit of customers at Waste Management Office.
7000-FR-MRF-MRWMD	559	9.8%	Various materials (cardboard, woodwaste, etc.) diverted out of refuse at MRWMD facilities	N/A	Weigh tickets at MRWMD Office
Hauling Service	41	0.7%	Used Cooking Oil	Actual Weight	Survey at Sand City Planning Dept.
Enter program name					
Enter program name					
<b>Subtotal Non-Residential Recycling</b>	<b>2408</b>	<b>42.3%</b>			
<b>Composting</b>					
Non-Residential Waste Audits*					See Section 9
<b>Other non-Residential composting (list each program separately)</b>					
4050-SP-WDW	36	0.6%	Source separated woodwaste/yardwaste loads received at MRWMD facilities.	N/A	Weigh tickets at MRWMD Office
Enter program name					
Enter program name					
Enter program name					
Enter program name					
<b>Subtotal Non-Residential Composting</b>	<b>36</b>	<b>0.6%</b>			
<b>Subtotal Non-Residential Diversion</b>	<b>2447</b>	<b>43.0%</b>			
<b>Residential/Non- Residential Diversion Activities</b>					
ADC					
Sludge					Weigh tickets at MRWMD Office
Scrap metal	54	0.9%	scrap metal diverted out of refuse at MRWMD facilities	N/A	
Construction and demolition			Source separated asphalt/concrete loads received at MRWMD facilities.	N/A	Weigh tickets at MRWMD Office
<b>Landfill salvage</b>	<b>76</b>	<b>1.3%</b>			

Diversion Activity	Actual tons	Relative Percent to Total Generation (A/Total Generation)	Specific material type(s) (List operation w/multiple materials in one box)	Specific conversion factor used (if any) and Source	Type of record and location of record
Please use the Board's program types. The program type glossary is online at: <a href="http://www.ciwmcb.ca.gov/locentral/paris/codes/reduce.htm">http://www.ciwmcb.ca.gov/locentral/paris/codes/reduce.htm</a>					
<b>Subtotal Residential/Non-Residential diversion</b>	130	2.3%			
<b>Total Diversion Tons</b>	2582	45.4%			
<b>Total Disposal Tons from Sec. 7</b>	3109	54.6%			
<b>Total Generation Tons (Div+Dis)</b>	5691				

## **9. Specific Non-Residential Sector Waste Audits-Top 10 Non-Residential Generators**

Please complete this table for the top 10 non-residential generators that were surveyed. List each non-residential generator separately from largest to smallest, based on total diversion tons. Audit reference number ties to your audit sheets.

(Form will perform all addition calculations).

Please provide an attachment 9 which includes all of the generators surveyed. Include for each generator (use type of generator in lieu of specific business name) diversion activity and material type and associated tonnage for each diversion activity/material type. Include copies of survey form(s) used.

Communication About the Health of the Environment

The City's Planning staff conducted a phone and on-site survey of recycling and reuse efforts of individual businesses within the City's two regional commercial/retail centers. The survey was conducted as to insure that the data collected was reasonably accurate, even though responses to the survey were occasionally based upon estimates provided by store representatives. The survey was conducted to avoid double counting, and assure that material tonnage amounts reported as individual corporate "in-house" recycling programs did not include recycled material collected by the City's franchise waste hauler. During on-site surveys, staff measured cardboard bale sizes and verified quantities. Photographs were taken to document cardboard bales, collection bins, compacting equipment, etc.. As a guide, staff utilized a document available from the California Integrated Waste Management Board (CIWMB), entitled "Conducting A Diversion Study: A Guide for California Jurisdictions" (final-draft, September 1999).

It was necessary to convert some of the collected data into a quantified tonnage weight. Therefore, conversion factors available on the CIWMB's website ([www.ciwmb.ca.gov/LGlibrary - Appendix J4](http://www.ciwmb.ca.gov/LGlibrary - Appendix J4)) were used for converting both the cardboard and pallets data into tonnage amounts. The following assumptions were used

for tonnage conversions:  
Based upon bale manufacturer  
pounds per single wood pallet.

In addition, a similar conversion chart was used for comparison in a document called "Reduce, Reuse, Recycle-It's Good Business! A Guide for California Businesses." The cardboard conversion factors were used in a calculating tonnage amounts for Generators (Audit No.) 1, 4, and 10. Wood pallet conversion factors were used in calculating tonnage amounts for Generator (Audit No.) 2 and 9. The remaining Generators (Audit Nos. 5, 7, and 8) provided actual weight tonnage amounts during the survey.

#### QUANTIFICATION EXPLANATIONS:

##### Cardboard:

The cardboard conversion factors were used in a calculating tonnage amounts for Generators (Audit No.) 1, 4, and 10. The remaining Generators (Audit Nos. 5, 7, and 8) provided actual weight tonnage amounts during the survey.

##### Generator 1:

This is a large wholesale business, encompassing 119,000 square feet of floor area. This operation deals in large volumes of products packaged in shipping cardboard. Bales behind store were measured by City staff at (on average) 2.9 cubic yards. Employees verified that the operation generated 12 to 15 bales per week (13.5 average used for calculations). Compactor visually verified on-site.

$$(52)(13.5)=702 \text{ bales}$$

$$(1400)(702)=982,800 \text{ lbs./yr.}$$

$$982,800/2000=491.4 \text{ tons/yr.}$$

Note: The conversion factor (1400 lbs./bale) for this generator was obtained from the baler manufacturer's specifications. Board and City staff saw these bales on site, and it was determined that they were approximately 42"X46"X70".

##### Generator 4:

According to the store manager, four bales of compacted cardboard bales generated each week. Cardboard bales measure at 1.54 cubic yards.

$$(1400lb./bale)(208 \text{ bales/yr.})=291,200 \text{ lbs./yr.}$$

$$=145.6 \text{ tons/yr.}$$

##### Generator 5:

Corporate distribution center claims 7,000 pounds of compacted cardboard bales per week from Sand City store. Compactor visually verified on-site.

$$\frac{7,000 \text{ lbs./week}}{2,000 \text{ lbs./ton}} = 3.5 \text{ tons/week}$$

$$(3.5 \text{ tons/week})(52 \text{ weeks}) = 182 \text{ tons/year}$$

##### Generator 7:

Corporate office records stated exact tonnage amount of 288.12 tons of compacted cardboard bales generated in 1999 by Sand City store. City staff visually confirmed bales and compactor at store. Average bale measured 2.2 cu.yds.

##### Generator 8:

Store manager claimed that in 1999, 30% of cardboard was collected by City's franchise waste hauler. The remaining 70% is shipped out by this operation to their corporate distribution center, equaling 11.67 tons per month. The 30% collected by franchise waste hauler is NOT included in this tonnage amount. Compactor visually verified on-site.

$$(11.67 \text{ tons/month})(12 \text{ months/year}) = 140 \text{ tons/year}$$

Generator 10:

Store manager claims 2.5 bales of compacted cardboard generated every other day. The average bale measures at 1.74 cubic yards. Corporate delivery trucks service this operation twice per week. Compactor visually verified on-site.

$$\frac{7 \text{ days/week}}{2 \text{ (every other day)}} = 3.5 \text{ days/week} \quad (3.5 \text{ days/wk})(2.5 \text{ bales}) = 8.75 \text{ bales/week} \quad (8.75 \text{ bales/wk})(52 \text{ weeks/yr.}) = 455 \text{ bales/year}$$

$$(1400 \text{ lbs./bale})(455 \text{ bales/yr.}) = 637,000 \text{ lbs./yr.} \\ = 318.5 \text{ tons/yr.}$$

Wood Pallets:

Wood pallet conversion factors were used in calculating tonnage amounts for Generator (Audit No.) 2 and 9.

Generator 2:

Upon site visit by City staff, the store manager verified that 72 pallets (average) were sent back on delivery trucks each week. At any given week there would be 144 pallets in use for this business (72 on site containing product and 72 offsite being restocked with product).

$$144 \text{ pallets/yr.} \quad (144 \text{ pallets/yr.})(40lbs./pallet) = 5,760 \text{ lbs./yr.} \quad \frac{5,760 \text{ lbs./yr.}}{2,000 \text{ lbs./ton}} = 2.88 \text{ tons/yr.}$$

Generator 9:

Store manager and staff confirmed that 6 to 8 (Average of 7) wood pallets were returned to corporate distribution center each week for reuse. Stack of wood pallets visually confirmed by City staff within storage/loading dock area of building. At any given week there would be 14 pallets in use for this business (7 on site containing product and 7 offsite being restocked with product).

$$14 \text{ pallets/yr.} \quad (14 \text{ pallets/yr.})(40lbs./pallet) = 560 \text{ lbs./yr.} \quad \frac{560 \text{ lbs./yr.}}{2,000 \text{ lbs./ton}} = .28 \text{ tons/yr.}$$

Paper:

Generator 4:

According to the store manager, an average of three boxes, each at 20 pounds, of computer paper is generated each week

$$(3 \text{ boxes/week})(20lbs./box) = 60 \text{ lbs./wk.} \quad (60 \text{ lbs./wk})(52 \text{ wk/yr.}) = 3,120 \text{ lbs./yr.} \quad \frac{3,120 \text{ lbs./yr}}{2,000 \text{ lbs./ton}} = 1.56 \text{ tons/yr}$$

10. For each restricted waste type [i.e., agricultural waste, inert solids, (e.g. concreter, asphalt, dirt, etc.) scrap metals and white goods (PRC Section 41781.2)] and associated program, please provide the following

a. If the diversion program started on or after January 1, 1990, complete the following table.

(Note: program name refers to one specific diversion program for that waste type; (e.g., diversion conducted by City Public Waste Dept).

Restricted Waste Type	Specific Program name	Year started	Tonnage
Scrap Metal	▼ Metal diverted at MRWMD MRF	1996	54
Inert Solids	▼ A/C diversion at MRWMD site	1987	76
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		
Pull Down for Waste Types	▼		

b. If the diversion program started before January 1, 1990, on a separate sheet, marked attachment 10b, provide the following documentation: (Note: If documentation for a waste type and program has already been approved by the Board, you do not have to provide an attachment 10b for that waste type and program.

Instead please provide date of Board approval of previously submitted information. 2/15/1996 (Date)

If documentation is not available, go to 10d.

- How the diversion was the result of a local action taken by the jurisdiction, which specifically resulted in the diversion [PRC Sec. 41781.2 (c) (1)].

- That the amount of that waste type diverted from the jurisdiction in 1990 was less than or equal to the amount of that waste type disposed at a permitted disposal facility by the jurisdiction in any year before 1990. (Note: this criterion is applicable to the entire jurisdiction, not to individual programs [PRC Sec. 41781.2 (c) (2)]).

- The jurisdiction is implementing, and will continue to implement, the diversion programs in its Source Reduction and Recycling Element.

c. If the diversion program started before January 1, 1990, and the documentation requested in 10b is available (but not yet approved by the Board), complete the table below for each program claimed:

Restricted Waste Type	Specific Program Name	New base year or reporting year diversion tonnage
Pull Down for Waste Types	▼ N/A	N/A
Pull Down for Waste Types	▼	
Pull Down for Waste Types	▼	
Pull Down for Waste Types	▼	
Pull Down for Waste Types	▼	

d. If the diversion program started before January 1, 1990, and the documentation requested in 10b is not available, please complete the table below for each program claimed. (Note: Only the difference between the new base year/reporting year and 1990 can be counted in the diversion rate calculation.)

Restricted Waste Type	Specific Program name	New base year or reporting year tonnage	1990 diversion tonnage	Difference
Pull Down for Waste Types	▼ N/A	N/A	N/A	N/A
Pull Down for Waste Types	▼			
Pull Down for Waste Types	▼			
Pull Down for Waste Types	▼			
Pull Down for Waste Types	▼			
Pull Down for Waste Types	▼			